

### Remarks

This Amendment is responsive to the Office Action of **October 3, 2003**. Reexamination and reconsideration of **claims 1-25** is respectfully requested.

### Summary of The Office Action

**Claim 25** was indicated to contain allowable subject matter.

**Claims 1, 5, 7-10, and 14** were rejected under 35 U.S.C. 103(a) as being unpatentable over Chakrabarti et al. (U.S. Pat. No. 6,418,433, hereinafter Chakrabarti) in view of Schuetze et al. (U.S. Pat. No. 6,567,797, hereinafter Schuetze).

**Claims 2, 3, 4, 6, 11-13** were rejected under 35 U.S.C. 103(a) as being unpatentable over Chakrabarti (U.S. Pat. No. 6,418,433) and Schuetze (U.S. Pat. No. 6,567,797) as applied to claims 1 and 9, and further, in view of Candan et al. (U.S. Pat. No. 6,549,896, hereinafter Candan).

**Claims 15-24** were rejected under 35 U.S.C. 103(a) as being unpatentable over Chakrabarti (U.S. Pat. No. 6,418,433) in view of Schuetze (U.S. Pat. No. 6,567,797) and Candan et al. (U.S. Pat. No. 6,549,896, hereinafter Candan).

### The Present Claims Patentably Distinguish Over the References of Record

Independent **claim 1** has been amended to clarify the adjusting step and in particular the link rank values. Claim 1 recites that the link rank values are determined from distributed values of content-based relevance from one or more pages that point to the selected page. The amended language is related to the language of dependent claims 3 and 4 but is stated in a different way. The amended language finds support in the present application, for example, in paragraphs [0037-0038] on page 12 and the examples that follow. No new matter has been added.

Independent **claim 9** has been similarly amended with clarifying language supported by dependent claim 13 and similar sections in the present application. No new matter has been added.

Independent **claims 1 and 9** (and dependent **claims 5, 7, 8, 10, and 14**) were rejected under 35 U.S.C. 103(a) as being unpatentable over Chakrabarti et al. (U.S. Pat. No. 6,418,433, hereinafter Chakrabarti) in view of Schuetze et al. (U.S. Pat. No. 6,567,797, hereinafter Schuetze).

On page 3 of the Office Action, it states that Schuetze describes a feature of adjusting the content-based relevance rank of a page based on a link structure from in-coming links and cites column 10, lines 40-67 to column 11, lines 1-11. Schuetze is directed to a system for browsing, retrieving, and recommending information from a collection of documents using multi-modal features of the documents (see abstract). Its primary feature is to provide a data representation model that facilitates analysis of the relationships among documents (col. 5, lines 59-63). In column 10 starting at line 40, Schuetze describes operating the system by employing eight possible document features including text content, inlinks, outlinks, and others. However, Schuetze does not describe adjusting the content-based relevance rank of a selected page based on a link structure of the pages including link rank values from in-coming links as recited in claim 1.

Schuetze generally describes that the “weights of each modality” can be adjusted by the user (e.g. 25% each) (see column 30, lines 33-40) but this is not related to adjusting content-based relevance ranks. Thus, Schuetze fails to teach or suggest the adjusting step as recited in claim 1. Therefore, combining the teachings of Schuetze with Chakrabarti still fails to teach or suggest the claimed features of claim 1. **Claim 1**, thus, patentably distinguishes over the references of record, individually and in combination, and is in condition for allowance. Accordingly, dependent claims 2-8 are also in condition for allowance.

Regarding independent **claim 9**, the Office Action applied the same reasoning as in claim 1. Claim 9 recites a similar feature of combining the content-based relevance rank with a link analysis rank from in-coming page links. For similar reasons as explained above, Chakrabarti combined with Schuetze fails to teach the claimed features of claim 9 and claim 9

patentably distinguishes over the references of record, individually and in combination. Accordingly, dependent claims 10-14 also patentably distinguish over the references of record and are in condition for allowance.

Independent **claim 15** has been amended to clarify the term “an associated page” within the “link analysis logic” element. It appears that the Office Action interpreted this term as being similar to a feature in Candan that states “a method for estimating an association between the media objects and the seed Web page accessed by a user” (see Candan, abstract and column col. 4, lines 63-64). The amendment to claim 15 should assist in showing the differences from the teachings of Candan and that Candan’s “estimating an association” is not related to the “link analysis logic” of claim 15.

**Claim 15** was rejected as being unpatentable over Chakrabarti (the ‘433 patent) in view of Schuetze (the ‘797 patent) and Candan et al. (U.S. Pat. No. 6,549,896, hereinafter Candan). In particular, page 6, paragraph 8 states that Chakrabarti teaches the claimed link analysis logic (see col. 10, lines 35-42). In column 10 and other columns, Chakrabarti explains that the system stores incoming and outgoing links from web pages in order to expand the focused database. If a page is relevant, entries are generated in a link table for the outlinks of the relevant page (col. 10, lines 35-42). A link ranking for each outlink is not determined and there is no suggestion to do anything else with links except store them (e.g. gather links) or prune them (e.g. delete links) (col. 10, lines 50-56). Thus, Chakrabarti fails to teach or suggest a link analysis logic for determining a link ranking for each of the outgoing links for each of the pages as recited in claim 15, and the other references of record also fail to teach or suggest this claimed feature. Claim 15 thus patentably distinguishes over the references of record individually, or in combination.

Furthermore, **claim 15** recites that the “link ranking for a selected page representing a probability of leaving the selected page by the out-going link.” The office action, on page 7, states that Candan teaches this claimed feature at column 16, lines 41-47. Column 16, lines 41-47 describes the probability that a pre-fetched page will be visualized (line 37) and that a factor is “the distance from the end-user’s current position to the page...” (e.g. how many links away is the pre-fetched page) and “end-user’s stickiness (the time that the end-user spends viewing the page).” Thus, Candan is not concerned with ranking results from a search query and does not

mention determining the probability of leaving a selected page as in claim 15. As such, the references of record fail to teach or suggest the recited “relevance rank adjuster” that uses the recited link rankings.

Therefore, the combination of Chakrabarti, Schuetze, and Candan fail to teach or suggest all the recited elements of independent claim 15. Claim 15, thus, patentably distinguishes over the references of record individually, or in combination.

Regarding dependent **claims 17 and 18** (dependent from independent claim 15), and **claim 21** (dependent from claim 20), the office action applies the same column 16, lines 41-47 from the Candan patent. Applicant respectfully submits that Candan fails to teach or suggest the claimed elements including “distributing the total probability of leaving the page to the out-going links of the page.” Candan describes determining the likelihood of a pre-fetched object will be utilized (col. 16, lines 35-40), not the probability of leaving a page, and does not mention distributing such a probability to out-going links. Therefore, dependent **claims 17, 18, and 21** also patentably distinguish over the references of record.

Applicant's have further added new **claim 26** that is based on a combination of independent claim 1 and dependent claim 4. No new matter has been added. Since the references fail to teach or suggest the distributing as claimed and combined with the features of claim 1, new claim 26 patentably distinguishes over the references of record and should be in condition for allowance.

Independent **claim 20** was rejected as being unpatentable over Chakrabarti (the ‘433 patent) in view of Schuetze (the ‘797 patent) and Candan et al. (the ‘896 patent). On pages 8-9 of the Office Action, it states that Schuetze describes a feature of adjusting the content-based relevance rank of a page that is influenced by a quantity and relevance of candidate pages that point to the page (see col. 10, lines 40-67 to col. 11, lines 1-11). Schuetze is directed to a system for browsing, retrieving, and recommending information from a collection of documents using multi-modal features of the documents (see abstract). Its primary feature is to provide a data representation model that facilitates analysis of the relationships among documents (col. 5, lines 59-63). In column 10 starting at line 40, Schuetze describes operating the system by employing eight possible document features including text content, inlinks, outlinks, and others. However,

Schuetze does not describe adjusting the content-based relevance rank of a selected page that is influence by a quantity and relevance of candidate pages that point to the selected page as recited in claim 20.

The Office Action also cites column 5, lines 33-37 of Schuetze as teaching the claimed adjusting step. At line 33, Schuetze describes adjusting search results by “namely image characteristics and indirect text characteristics.” There is no mention of adjusting the content-based relevance rank of a candidate page that is influence by a quantity and relevance of candidate pages that point to the candidate page as recited in claim 20.

Schuetze, in columns 29 and 30, describes using inlinks and outlinks, and equally weighting the modalities of inlinks, outlinks, text and usage (e.g. see column 29, lines 55-58). However, it seems these features are for allowing a user to “specify which clusters to display” (col. 29, lines 51-54). Schuetze fails to teach or suggest the claimed adjusting step as recited in claim 20, and thus, claim 20 patentably distinguishes over the references of record, individually and in combination. Accordingly, dependent **claims 21-24** are also in condition for allowance.

With further reference to independent **claim 20**, the Office Action on page 9 states that the claimed assigning step is taught by Candan, and cites column 16, lines 35-46. Candan explains that the system captures information like the time the end-user spends viewing a page to determine the likelihood that a pre-fetched object will be used by the end-user. It seems Candan is trying to determine how long to maintain a pre-fetched object and when to discard it, which is related to optimizing pre-fetch scheduling (see column 4, line 46-55). This is not related to assigning a content relevance rank of a page in response to a search query. There is no teaching or suggestion about assigning a content-based relevance rank based on a probability that a user will stay on a selected candidate page as recited in claim 20.

Therefore, combining the teachings of Candan with Chakrabarti and Schuetze fail to teach or suggest independent claim 20. Thus for these additional reasons, claim 20 patentably distinguishes over the references of record, individually and in combination.

Dependent **claim 25** was indicated to contain allowable subject matter and has been rewritten in independent form. No new matter has been added. Claim 25 should now be in condition for allowance.

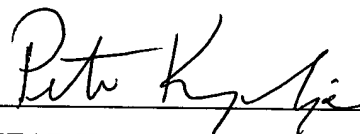
**Invitation to Contact Applicant's Attorney**

The Examiner is invited to contact the applicant's attorney to resolve any issues or to clarify any part of this response.

**Conclusion**

For the reasons set forth above, **claims 1-26** patentably and unobviously distinguish over the references of record and are now in condition for allowance. An early allowance of all claims is earnestly solicited.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Petar Kraguljac", is written over a horizontal line.

PETAR KRAGULJAC (Reg. No. 38,520)

(216) 363-4162